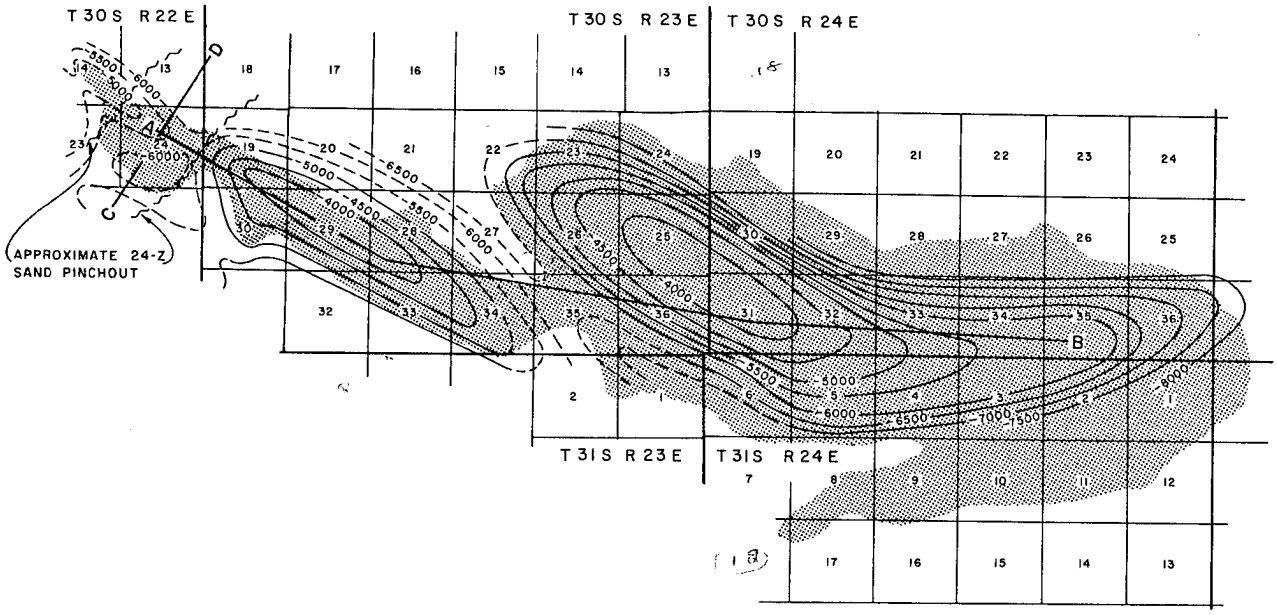
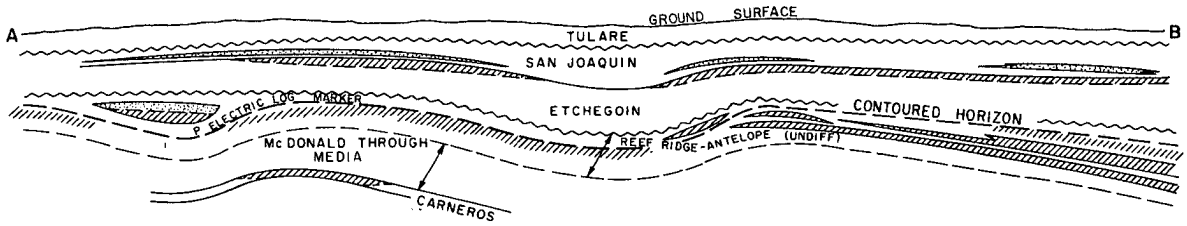
ELK HILLS OIL FIELD

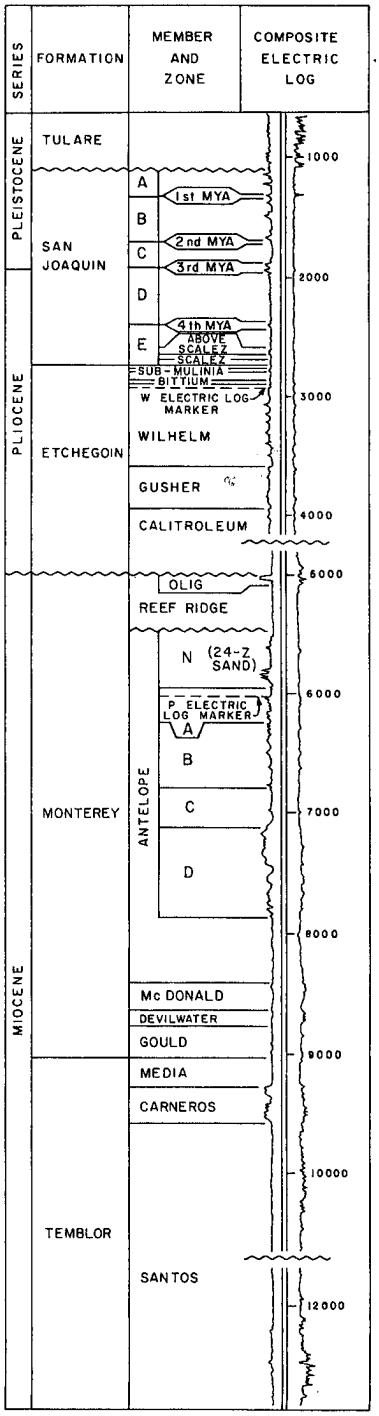
VIB 1973
w/ primacy
application.

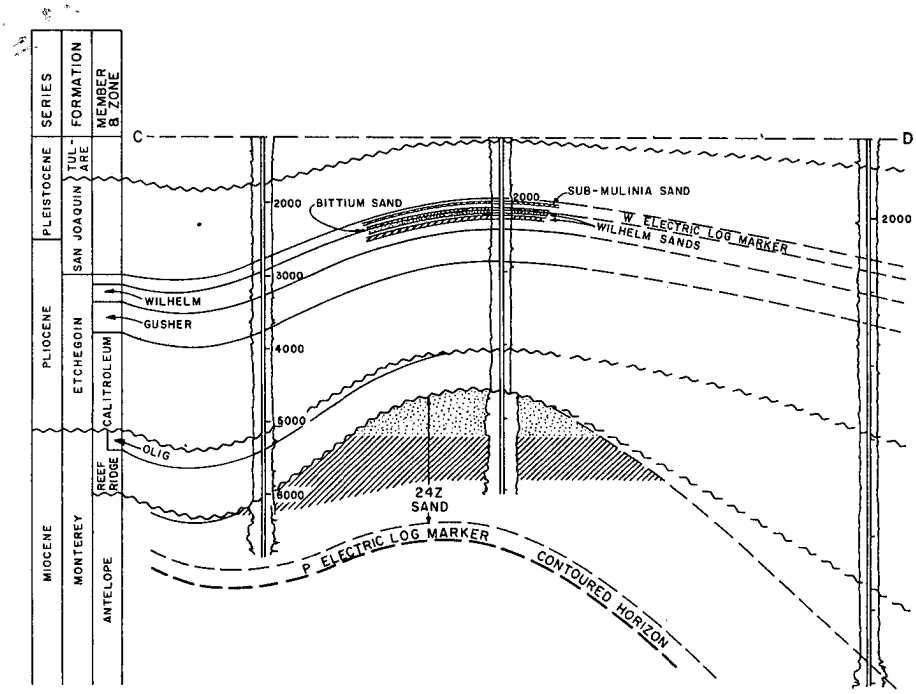


CONTOURS ON P ELECTRIC LOG MARKER

ELK HILLS OIL FIELD







LOCATION: 10 miles north of Taft

TYPE OF TRAP: Anticlines; lithofacies changes

ELEVATION: 300 - 1,500

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production: Oil (bbl)	Initial daily production: Gas (Mcf)	Date of completion
Mya (gas)	Unit Operation Naval Petroleum Reserve No. 1, Standard Oil Co. of Calif., Operator No. 5X-36R	Standard Oil Co. of Calif. "Hay" 5	36 30S 23E	MD	0	33,000	May 1919
Upper [A]	Unit Operation Naval Petroleum Reserve No. 1, Standard Oil Co. of Calif., Operator No. 1-26R	Associated Oil Co. No. 1	26 30S 23E	MD	15	N.A.	Jun 1911
Olig	Unit Operation Naval Petroleum Reserve No. 1, Standard Oil Co. of Calif., Operator No. 362-30R	Same as present	30 30S 23E	MD	0	[B]	N.A.
Stevens	Unit Operation Naval Petroleum Reserve No. 1, Standard Oil Co. of Calif., Operator No. 5-342-31S	Standard Oil Co. of Calif. No. 42	31 30S 24E	MD	1,284	1,039	Aug 1941
Carneros	Unit Operation Naval Petroleum Reserve No. 1, Standard Oil Co. of Calif., Operator No. 555-30R	Unit Operation Naval Petroleum Reserve No. 1, Standard Oil Co. of Calif., Operator No. X-55-30R	30 30S 23E	MD	230	1,680	Jan 1952

Remarks: [A] Includes Scalez, Mulinia, Bittium, Wilhelm-Gusher, and Calitroleum sands.
[B] Not tested in this well. Potential is 1,000 Mcf per day.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth: Strata	At total depth: Age
Unit Operation Naval Petroleum Reserve No. 1, Standard Oil Co. of Calif., Oper. No. 555-30R	Unit Operation Naval Petroleum Reserve No. 1, Standard Oil Co. of Calif., Oper. No. X-55-30R	Aug 1950	30 30S 23E	MD	12,856	Upper Santos	early Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic: Age	Geologic: Formation	Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
Mya (gas)	2,300	50	Pliocene	San Joaquin	1,015	2,780	III
Scalez	2,400	80	Pliocene	San Joaquin	18	2,100	See Remarks
Mulinia	2,700	55	Pliocene	Etchegoin		1,900	See Remarks
Bittium	2,850	20	Pliocene	Etchegoin	to	2,000	See Remarks
Wilhelm-Gusher	3,000	60	Pliocene	Etchegoin		1,700	See Remarks
Calitroleum	3,200	22	Pliocene	Etchegoin	40	N.A.	See Remarks
Olig	5,000	15	late Miocene	Monterey	--	1,500	III
Stevens	6,500	800	late Miocene	Monterey	35	1,200	IV
Carneros	9,300	200	early Miocene	Temblor	50	750	IV

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

1972 Production: Oil (bbl)	1972 Production: Net gas (Mcf)	1972 Production: Water (bbl)	1972 Proved acreage	1972 Average number producing wells	Cumulative production: Oil (bbl)	Cumulative production: Gas (Mcf)	Peak oil production: Barrels	Peak oil production: Year	Total number of wells: Drilled	Total number of wells: Completed	Maximum proved acreage
776,469	13,380	7,647,760	18,590	119	281,627,730	169,552,289	17,990,462	1921	1,238	1,149	19,770

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1957	50,953,625	4
Gas injection for repressuring	1945	33,714,948	5

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: Upper zones: 10 3/4" cem. 200; 7" cem. above zone; 5 1/2" liner landed through zone. Lower zones: 10 3/4" cem. 900; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Percolation and evaporation sumps located on outcrop of early Tulare; injection in water flood projects.

REMARKS: BOPE not required for development wells, except in areas where shallow gas zones are present, then Class III is required. No dry gas production in 1972; cumulative dry gas production 98,499,119 Mcf; peak production (1947) 3,317,692 Mcf; 11 dry gas wells were completed.

REFERENCES: Lorshbough, A.L., Western Portion of Elk Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 53, No. 1 (1967).

McLaughlin, R.P., Natural Gas Development in the Elk Hills, Kern County, Calif.: Calif. State Mining Bureau, Summary of Operations--Calif. Oil Fields, Vol. 4, May (1919).

Roberts, D.C., Fossil Markers of Midway-Sunset-Elk Hills Region in Kern County, Calif.: Calif. State Mining Bureau, Summary of Operations--Calif. Oil Fields, Vol. 12, Apr (1926).

Saunders, L.W., Recent Developments in the East End of the Elk Hills Oil Field: Calif. State Mining Bureau, Summary of Operations--Calif. Oil Fields, Vol. 10, May (1925).

Thoms, C.C. and F.M. Smith, Notes on Elk Hills Oil Field: Calif. State Mining Bureau, Summary of Operations--Calif. Oil Fields, Vol. 7, No. 1 (1921).